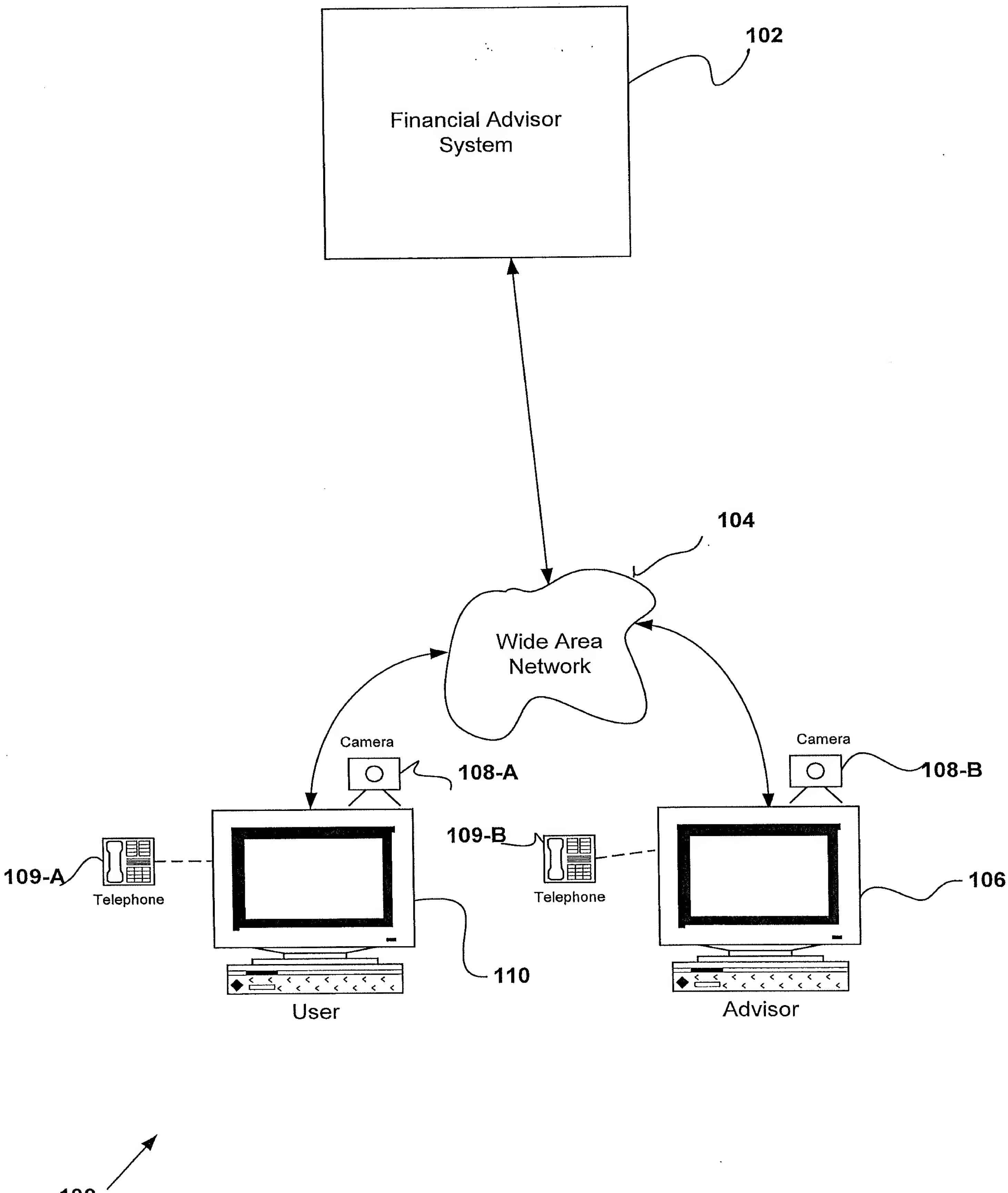

102
Financial Advisor System
104
Wide Area Network
Camera
108-A
Camera
108-B
109-B
Telephone
109-A
Telephone
106
110
User
Advisor
100

Figure 1

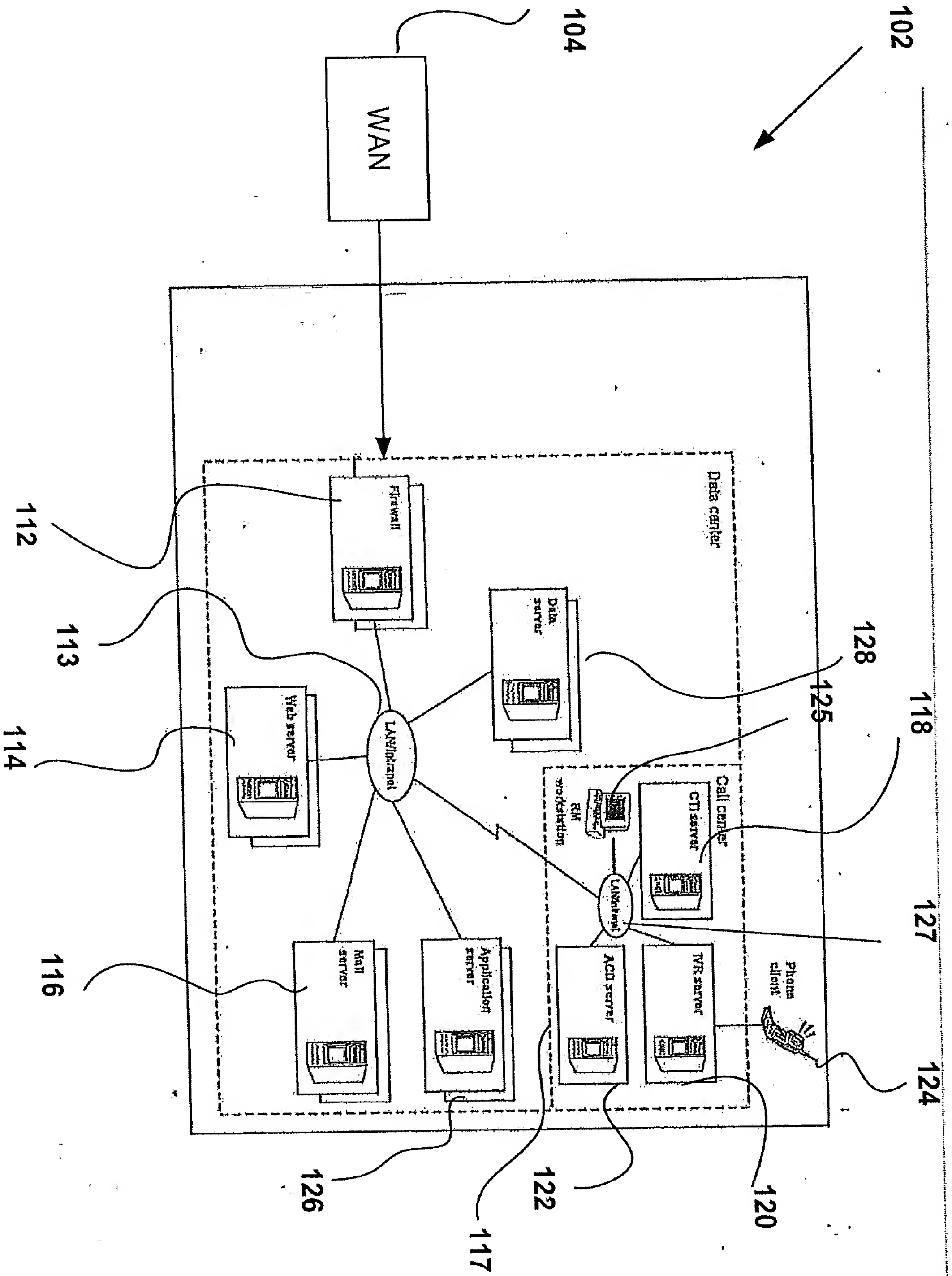

102
104
WAN
Data center
Firewall
Data server
Web server
LAN/Intranet
Mail server
Application server
Call center
CTI server
RM workstation
LAN/Intranet
ACD server
IVR server
Phone client
112
113
114
116
126
117
122
120
124
127
118
125
128

Figure 2

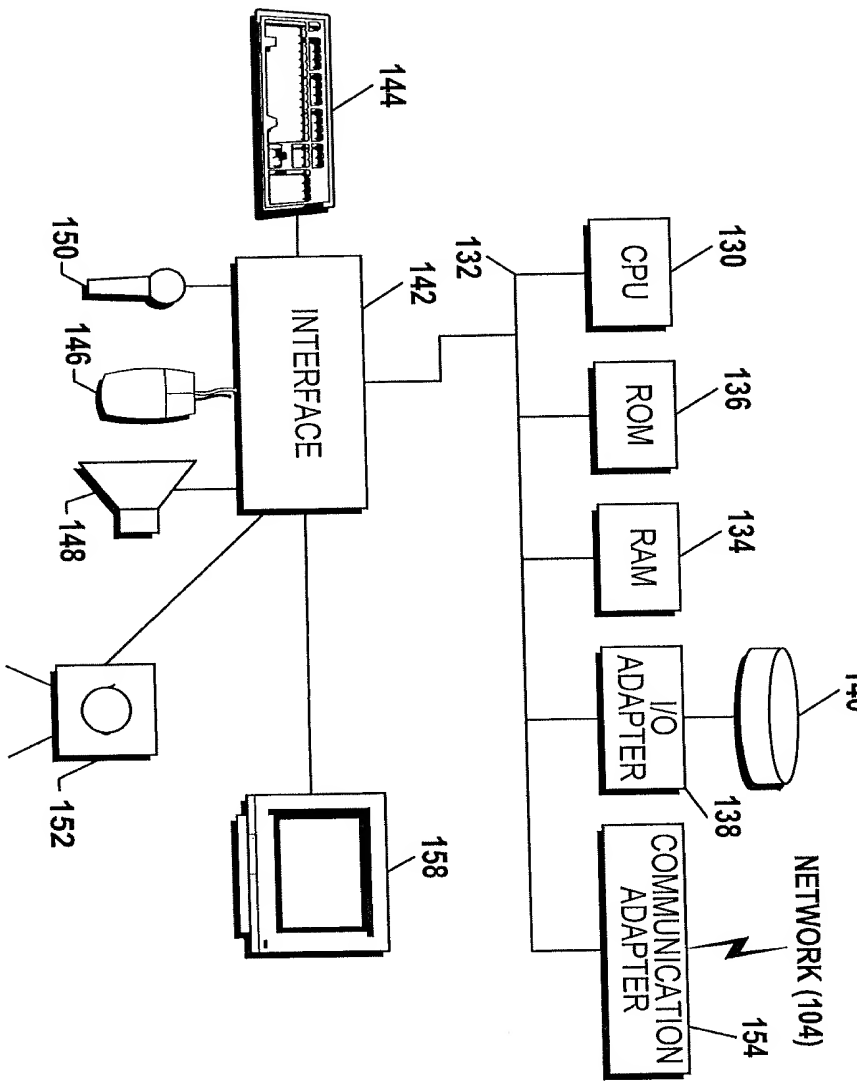

144
150
132
130
CPU
142
INTERFACE
136
ROM
146
148
134
RAM
140
I/O
ADAPTER
138
152
158
NETWORK (104)
COMMUNICATION
ADAPTER
154

Figure 3

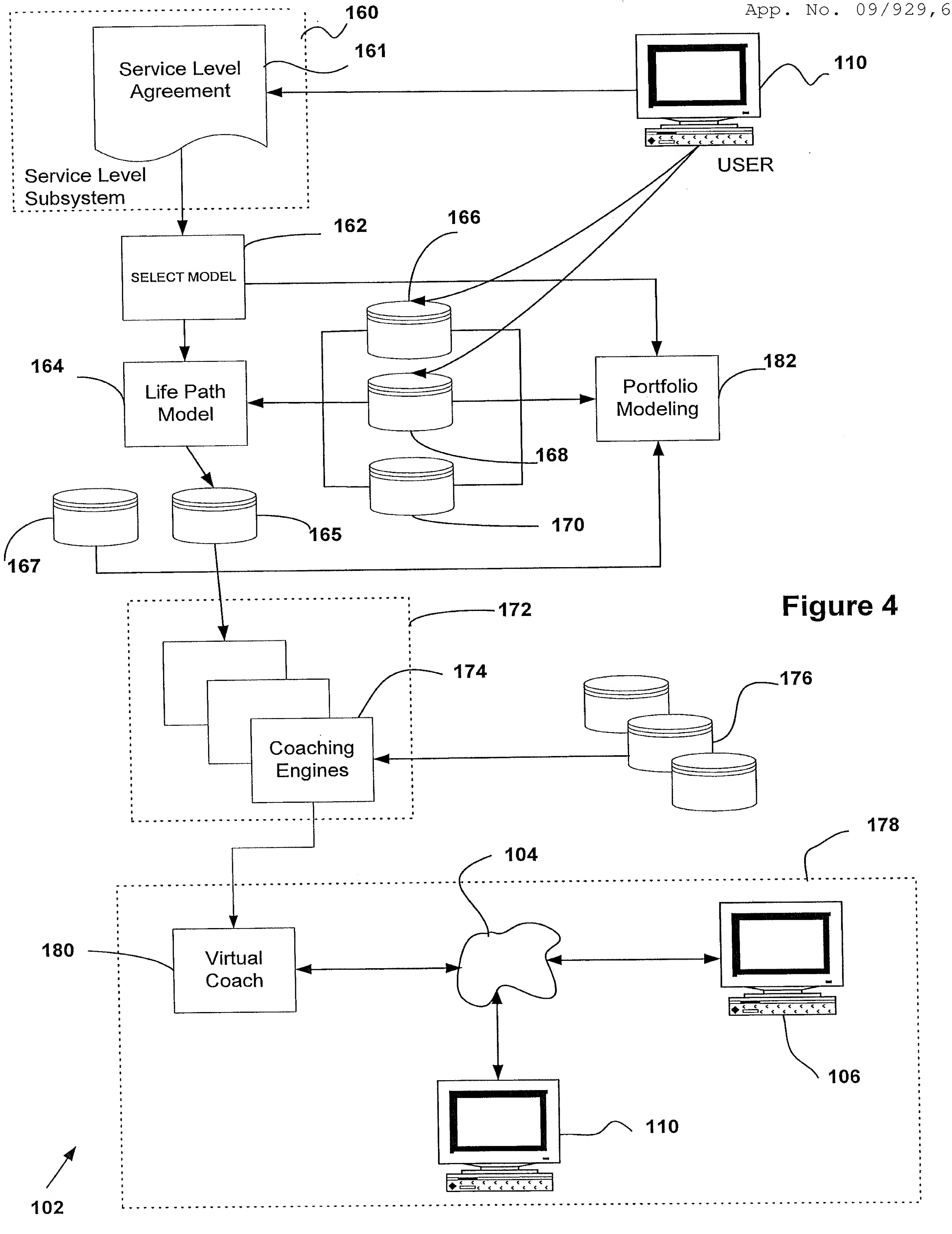

160
161
Service Level Agreement
Service Level Subsystem
110
USER
162
SELECT MODEL
166
164
Life Path Model
182
Portfolio Modeling
168
170
165
167
172
174
Coaching Engines
176
104
178
180
Virtual Coach
106
110
102

Figure 4

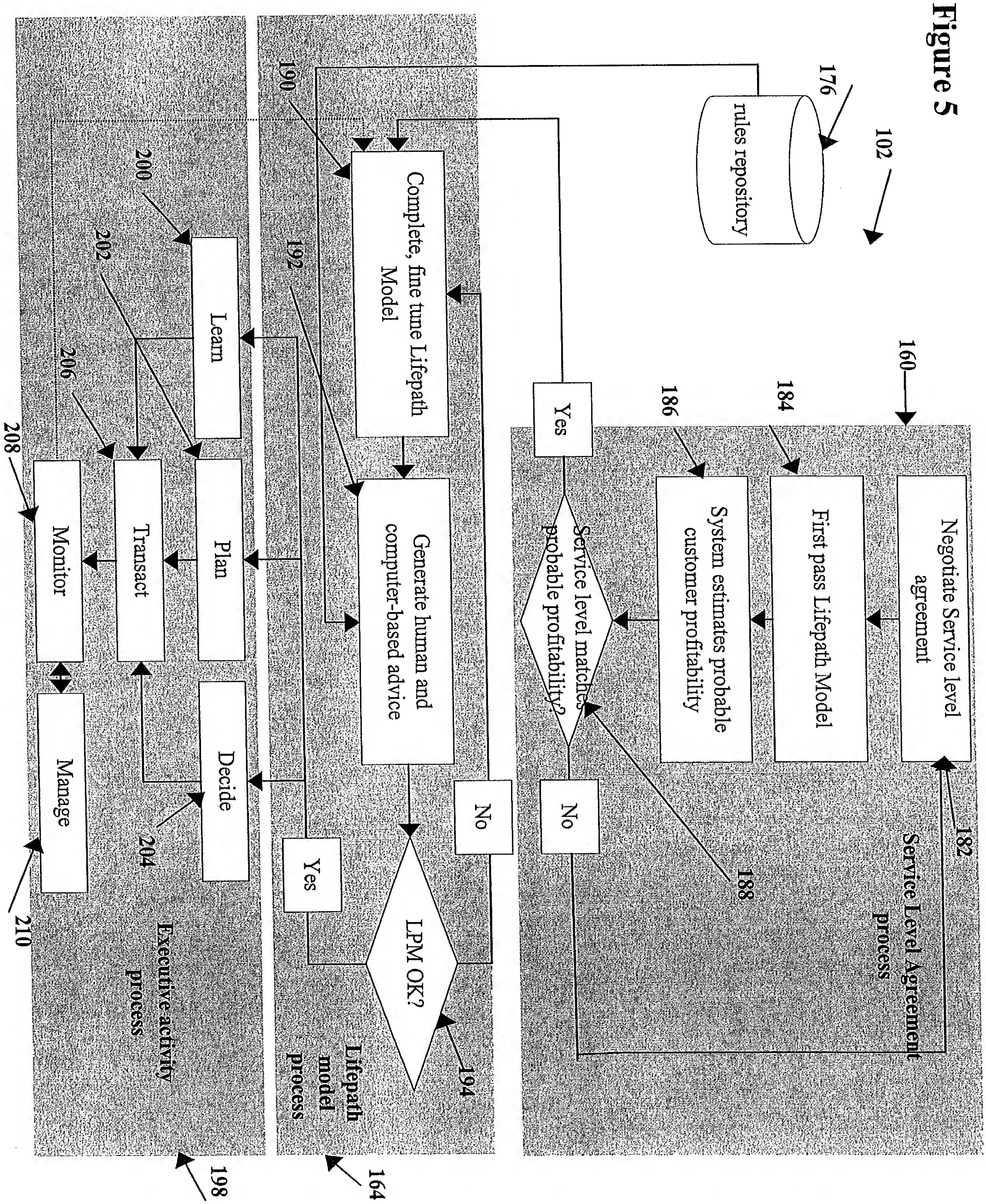
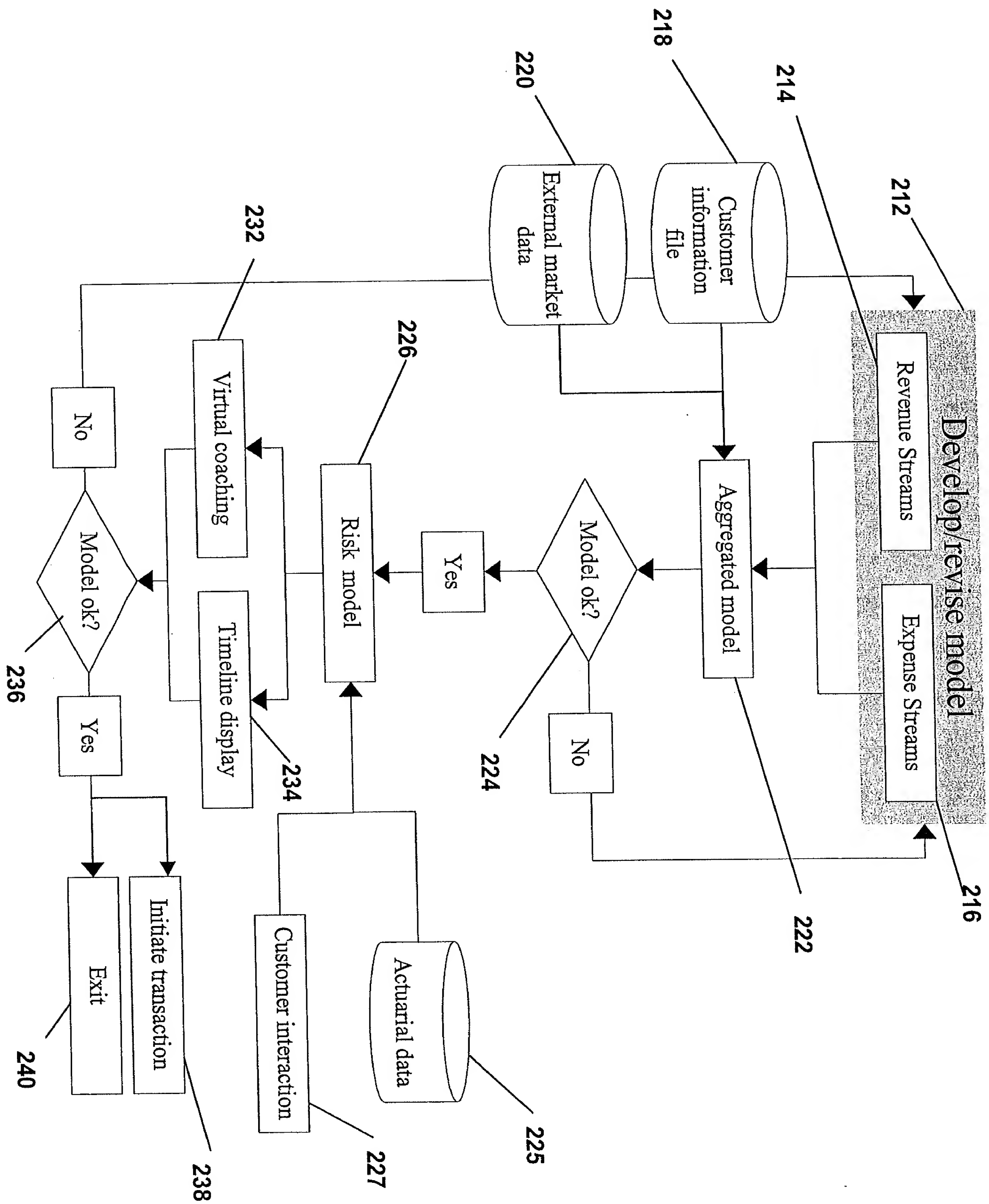

102
176
rules repository
160
Service Level Agreement process
Negotiate Service level agreement
184
First pass Lifepath Model
186
System estimates probable customer profitability
Service level matches probable profitability?
188
Yes
No
182
164
Lifepath model process
190
Complete, fine tune Lifepath Model
192
Generate human and computer-based advice
LPM OK?
194
Yes
No
198
Executive activity process
200
Learn
202
Plan
206
Transact
208
Monitor
Decide
204
Manage
210

Figure 5

Figure 6


Develop/revise model
Revenue Streams
Expense Streams
Customer information file
External market data
Aggregated model
Model ok?
Yes
No
Risk model
Actuarial data
Customer interaction
Virtual coaching
Timeline display
Model ok?
No
Yes
Initiate transaction
Exit
212
214
216
218
220
222
224
225
226
227
232
234
236
238
240

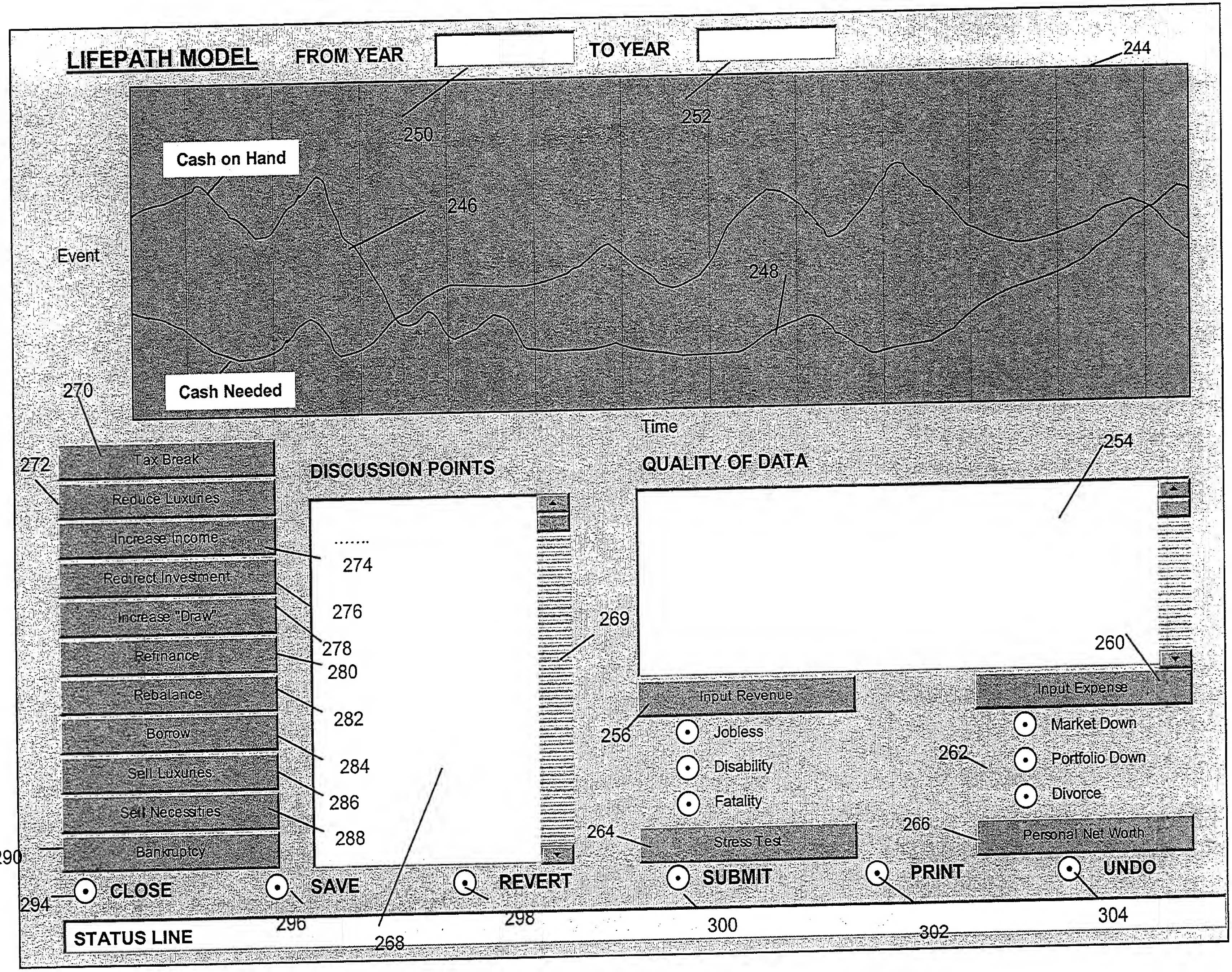

LIFEPATH MODEL
FROM YEAR
TO YEAR
244
250
252
Cash on Hand
246
248
Event
Cash Needed
Time
270
272
Tax Break
Reduce Luxuries
Increase Income
Redirect Investment
Increase "Draw"
Refinance
Rebalance
Borrow
Sell Luxuries
Sell Necessities
Bankruptcy
290
DISCUSSION POINTS
....
274
276
278
280
282
284
286
288
269
QUALITY OF DATA
254
260
Input Revenue
256
Jobless
Disability
Fatality
264
Stress Test
Input Expense
262
Market Down
Portfolio Down
Divorce
266
Personal Net Worth
CLOSE
294
SAVE
296
REVERT
298
SUBMIT
300
PRINT
302
UNDO
304
STATUS LINE
268

FIGURE 7

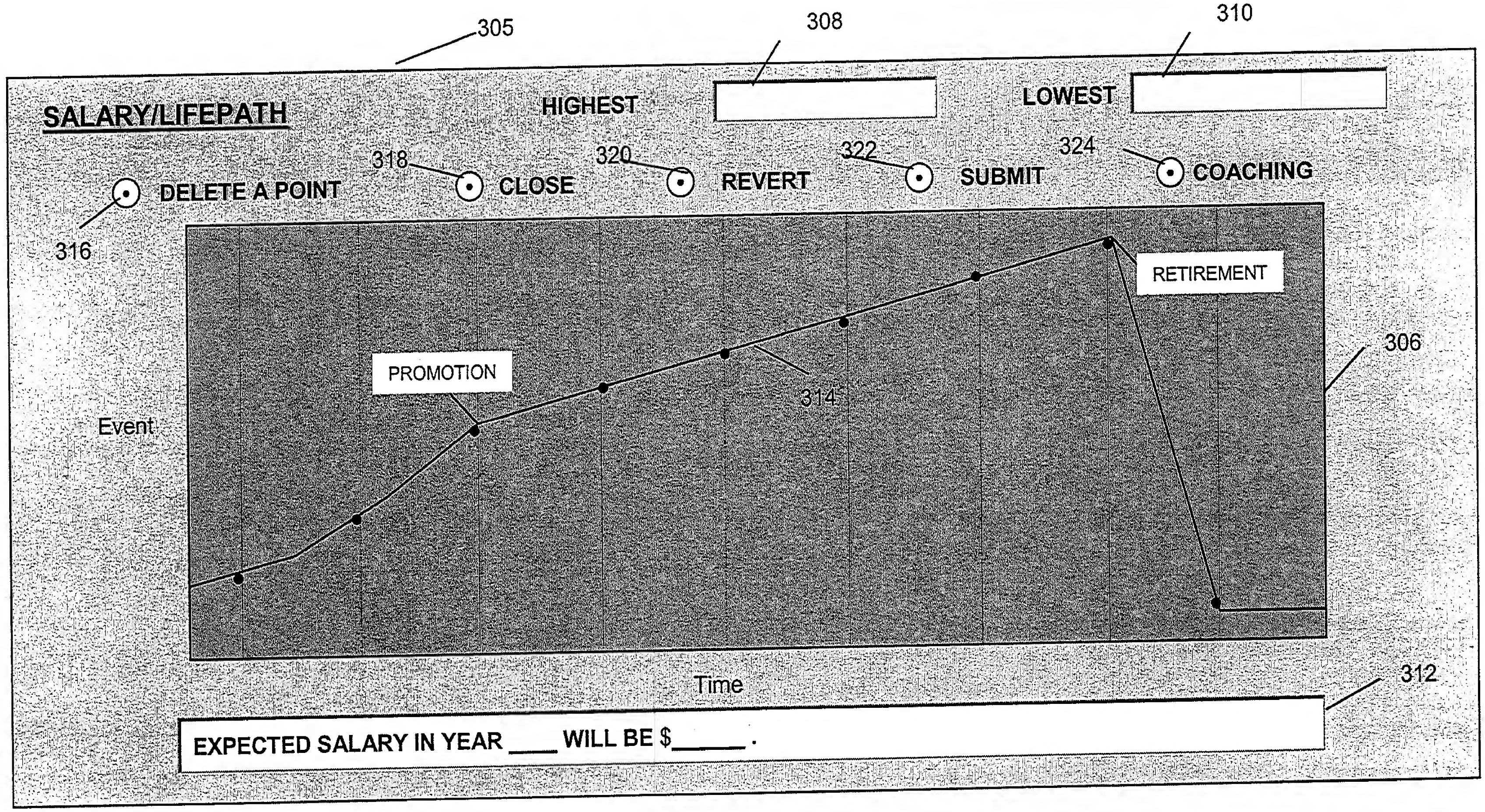


FIGURE 8

*All values in current dollars as if inflation will be 0%. Inflation will be represented by discounting it from all compound growth estimates

SALARY INTERACTION

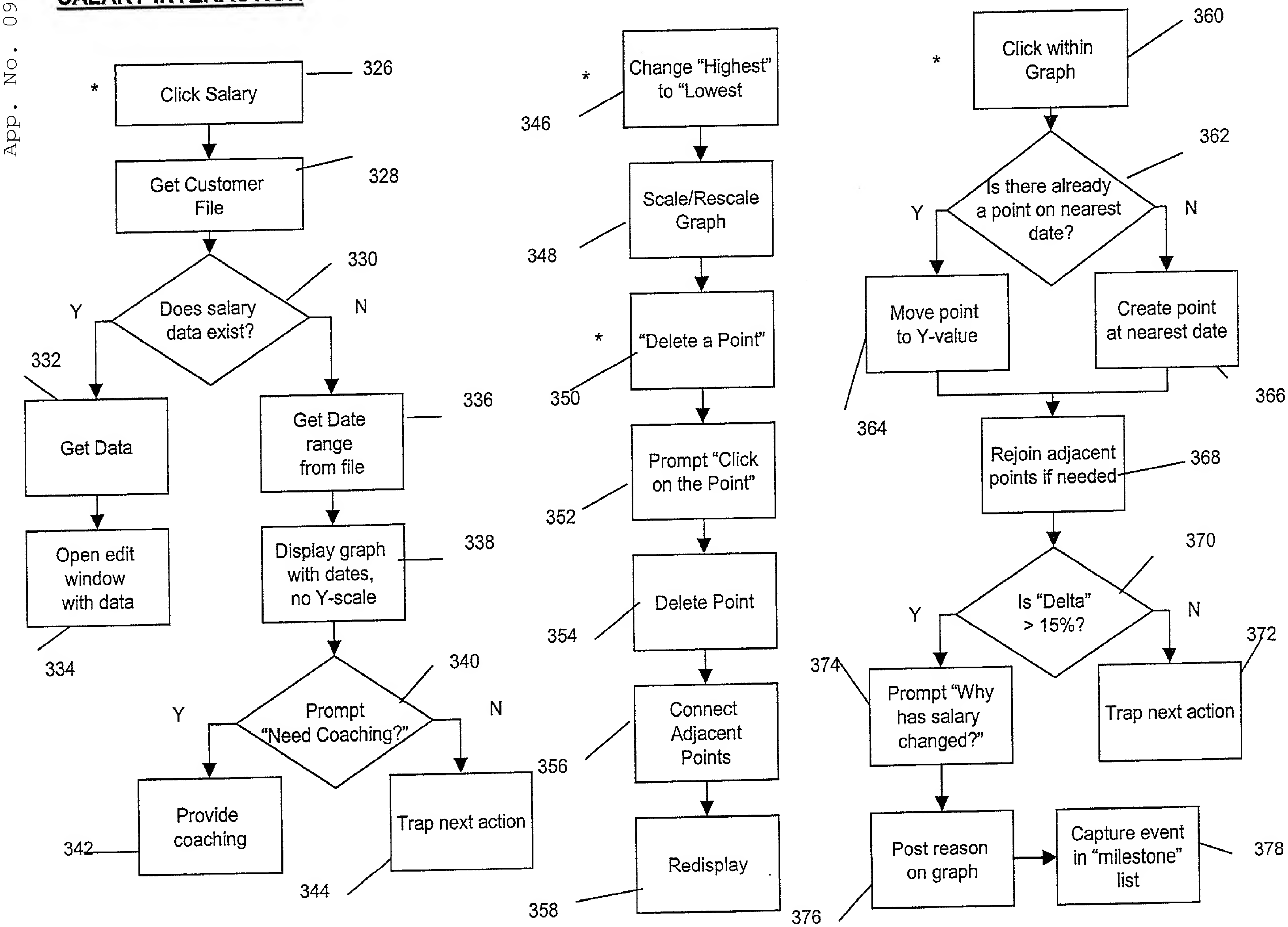


Figure 9

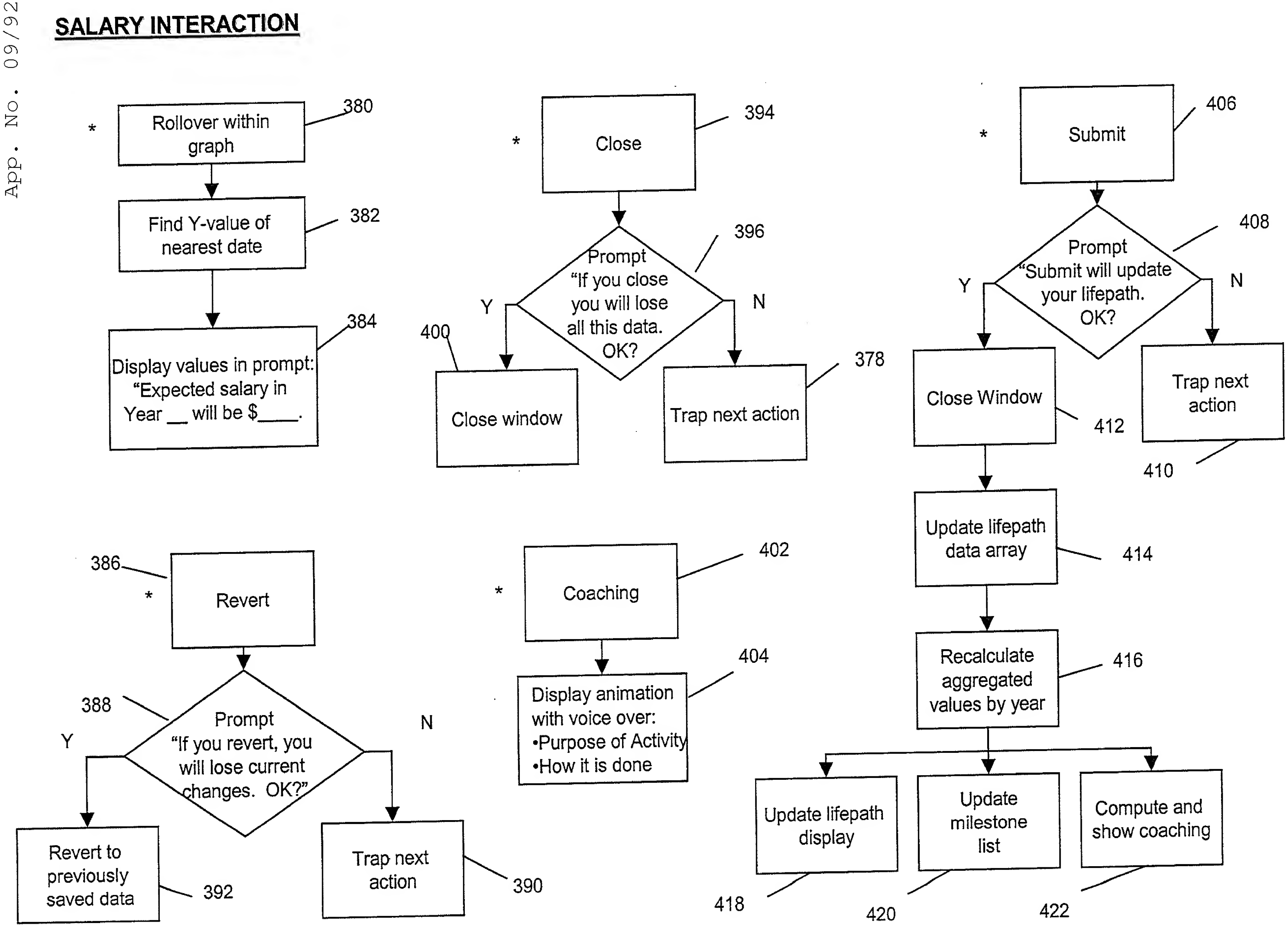
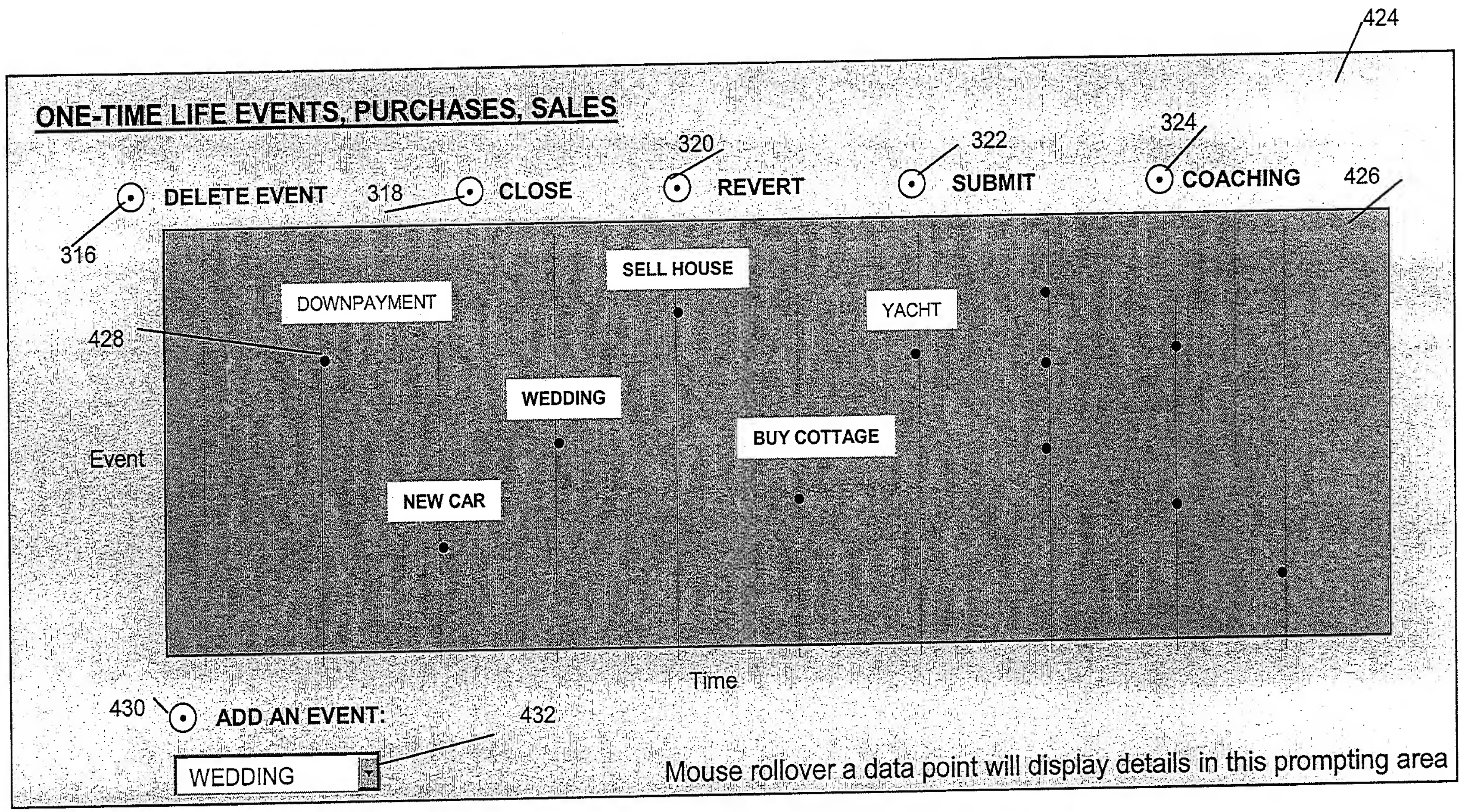

SALARY INTERACTION
*
Rollover within graph
380
Find Y-value of nearest date
382
Display values in prompt: "Expected salary in Year __ will be $____.
384
*
Close
394
Prompt "If you close you will lose all this data. OK?
396
Y
N
400
Close window
Trap next action
378
*
Submit
406
Prompt "Submit will update your lifepath. OK?
408
Y
N
Close Window
412
Trap next action
410
Update lifepath data array
414
Recalculate aggregated values by year
416
Update lifepath display
418
Update milestone list
420
Compute and show coaching
422
386
*
Revert
388
Prompt "If you revert, you will lose current changes. OK?"
Y
N
Revert to previously saved data
392
Trap next action
390
*
Coaching
402
Display animation with voice over:
•Purpose of Activity
•How it is done
404

FIGURE 10


424
ONE-TIME LIFE EVENTS, PURCHASES, SALES
DELETE EVENT
316
318
CLOSE
320
REVERT
322
SUBMIT
324
COACHING
426
DOWNPAYMENT
428
SELL HOUSE
YACHT
WEDDING
BUY COTTAGE
NEW CAR
Event
Time
430
ADD AN EVENT:
432
WEDDING
Mouse rollover a data point will display details in this prompting area

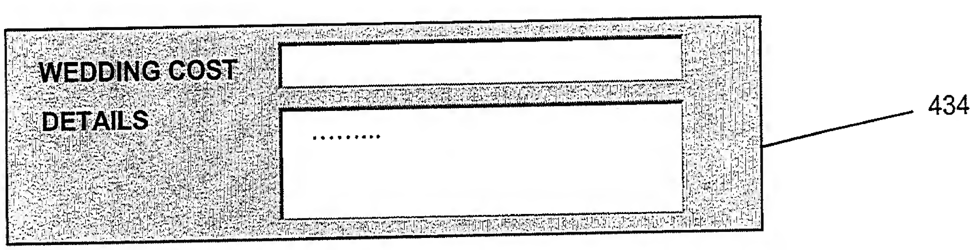
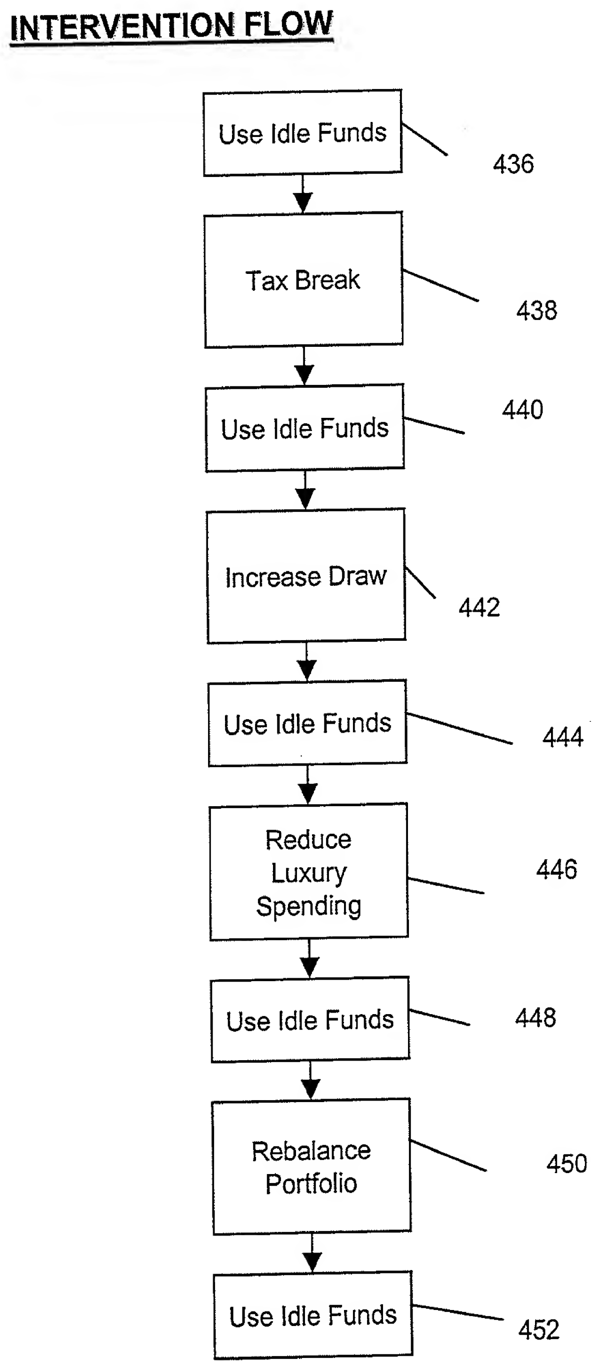

WEDDING COST
DETAILS
434

FIGURE 11


INTERVENTION FLOW
Use Idle Funds
436
Tax Break
438
Use Idle Funds
440
Increase Draw
442
Use Idle Funds
444
Reduce Luxury Spending
446
Use Idle Funds
448
Rebalance Portfolio
450
Use Idle Funds
452

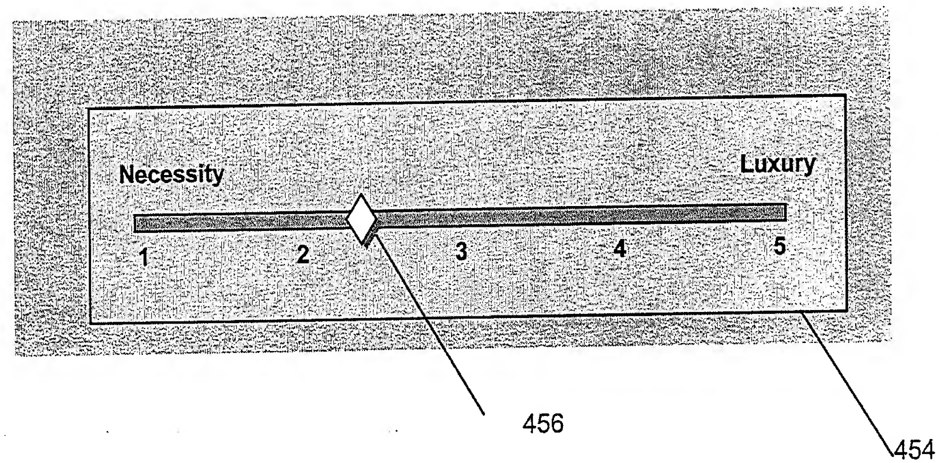

Necessity
Luxury
1
2
3
4
5
456
454

FIGURE 12

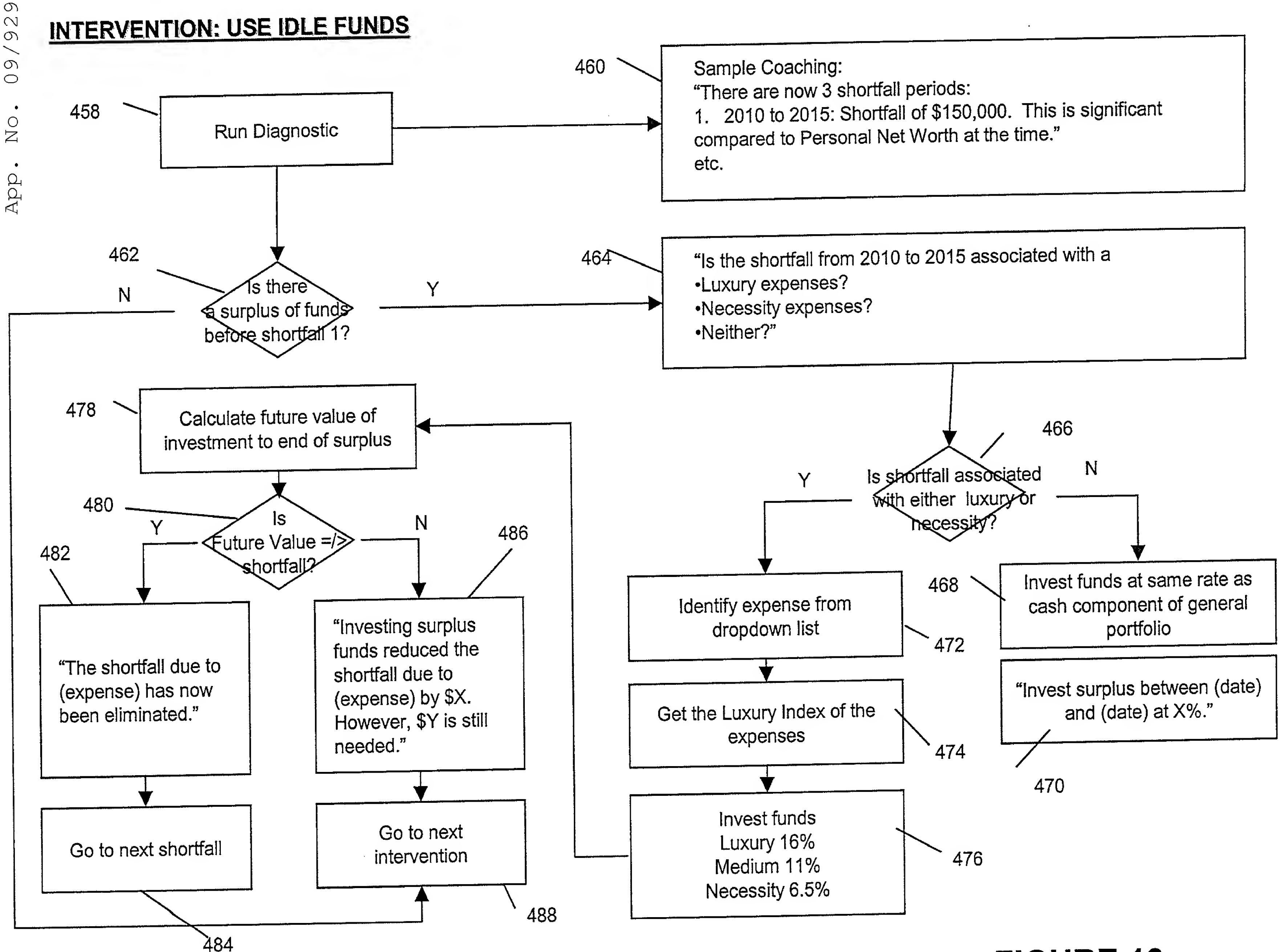

INTERVENTION: USE IDLE FUNDS
458
Run Diagnostic
460
Sample Coaching:
"There are now 3 shortfall periods:
1. 2010 to 2015: Shortfall of $150,000. This is significant compared to Personal Net Worth at the time."
etc.
462
Is there a surplus of funds before shortfall 1?
N
Y
464
"Is the shortfall from 2010 to 2015 associated with a
•Luxury expenses?
•Necessity expenses?
•Neither?"
478
Calculate future value of investment to end of surplus
480
Is Future Value =/> shortfall?
Y
N
482
"The shortfall due to (expense) has now been eliminated."
486
"Investing surplus funds reduced the shortfall due to (expense) by $X. However, $Y is still needed."
Go to next shortfall
484
Go to next intervention
488
466
Is shortfall associated with either luxury or necessity?
Y
N
Identify expense from dropdown list
472
Get the Luxury Index of the expenses
474
Invest funds
Luxury 16%
Medium 11%
Necessity 6.5%
476
468
Invest funds at same rate as cash component of general portfolio
"Invest surplus between (date) and (date) at X%."
470

FIGURE 13

INTERVENTION: TAX BREAK

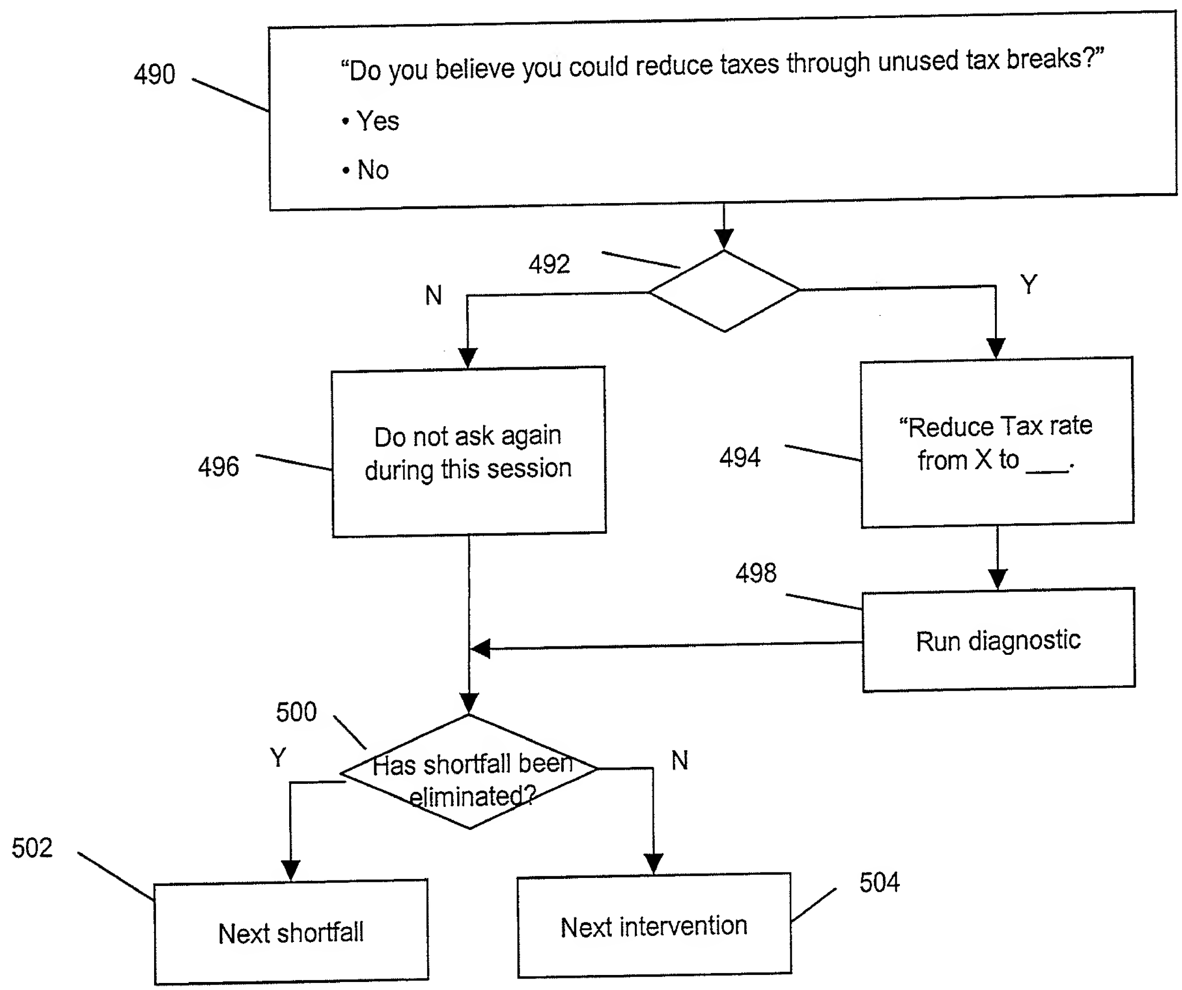


FIGURE 14

INTERVENTION: INCREASE DRAW

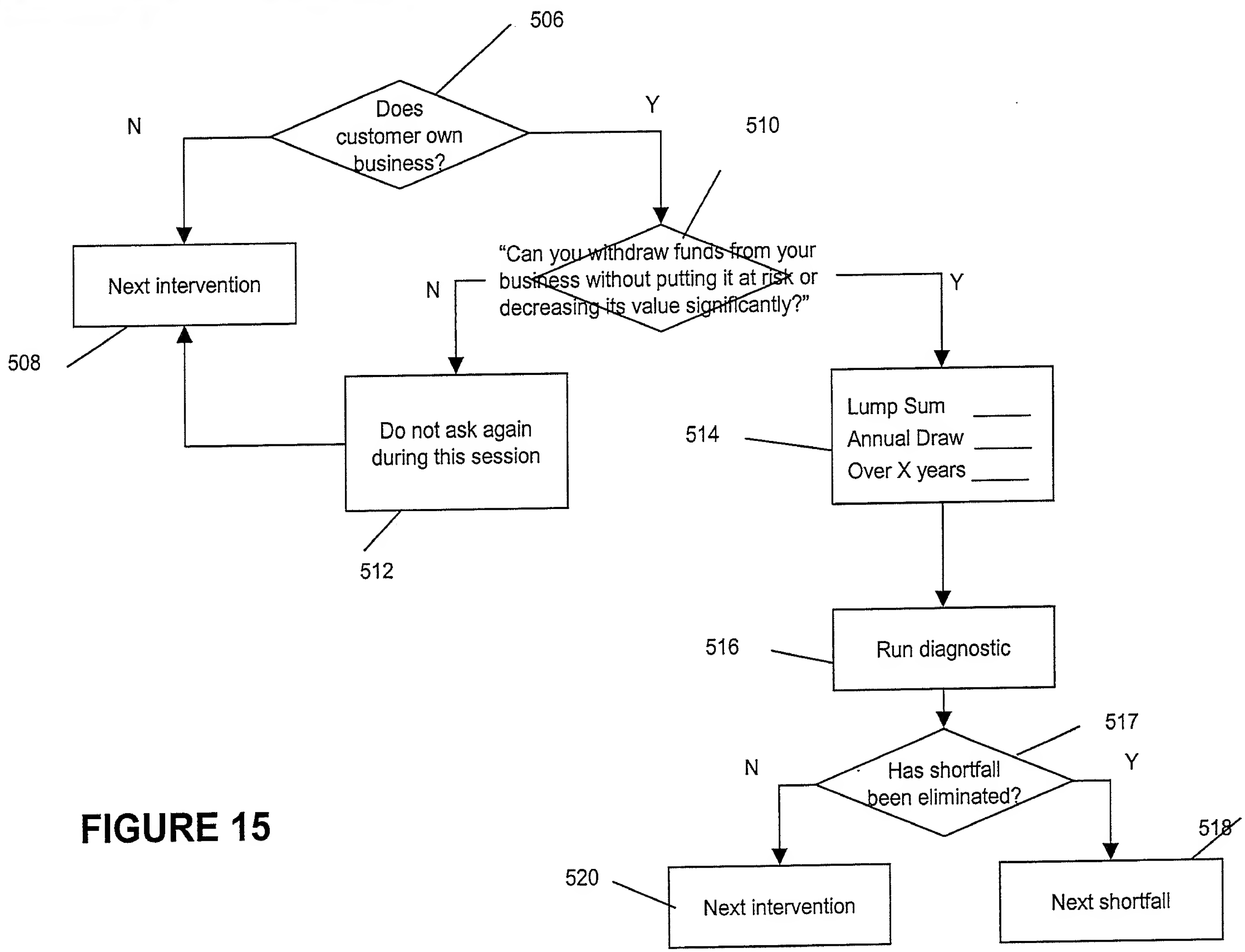


FIGURE 15

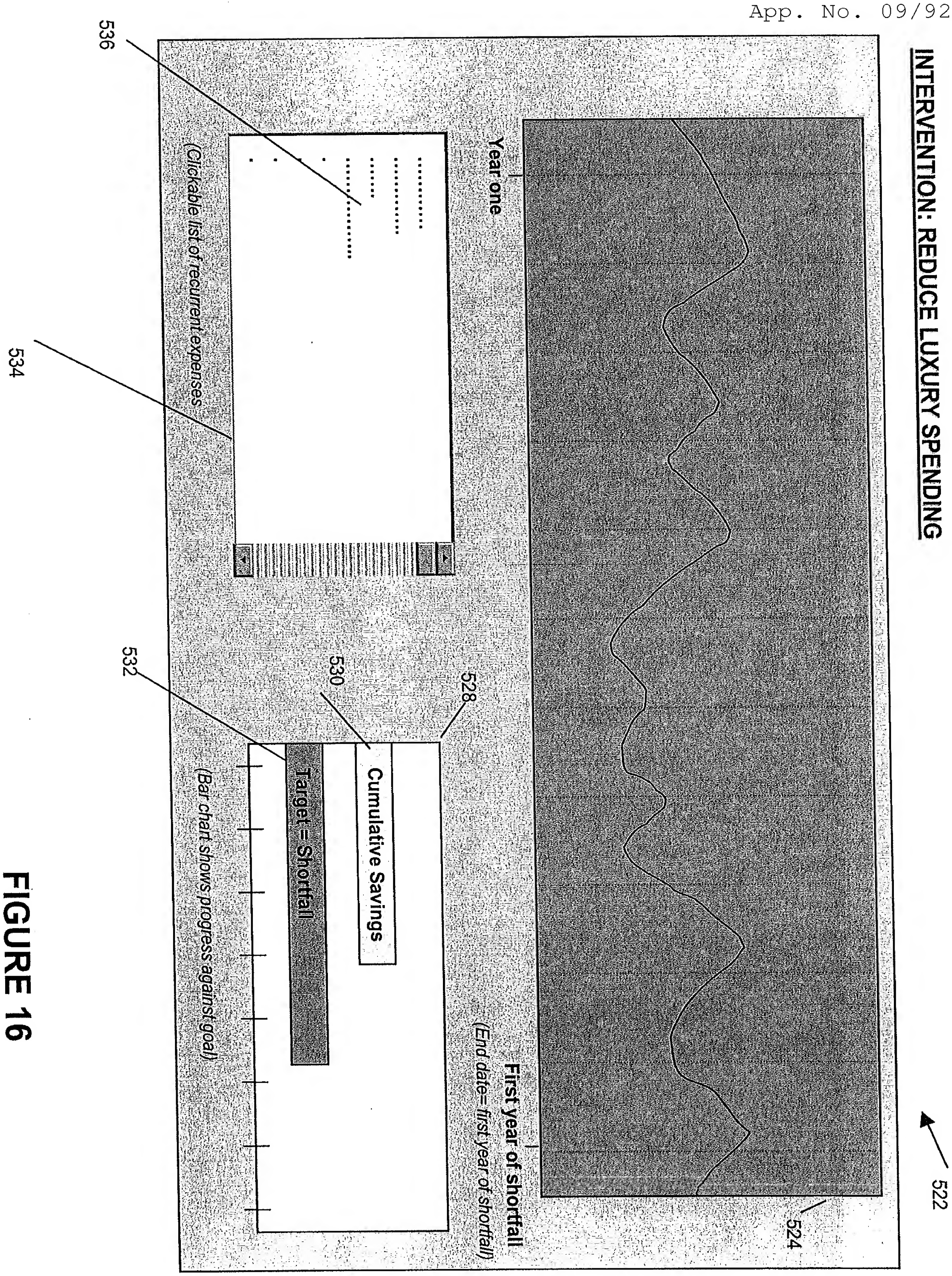
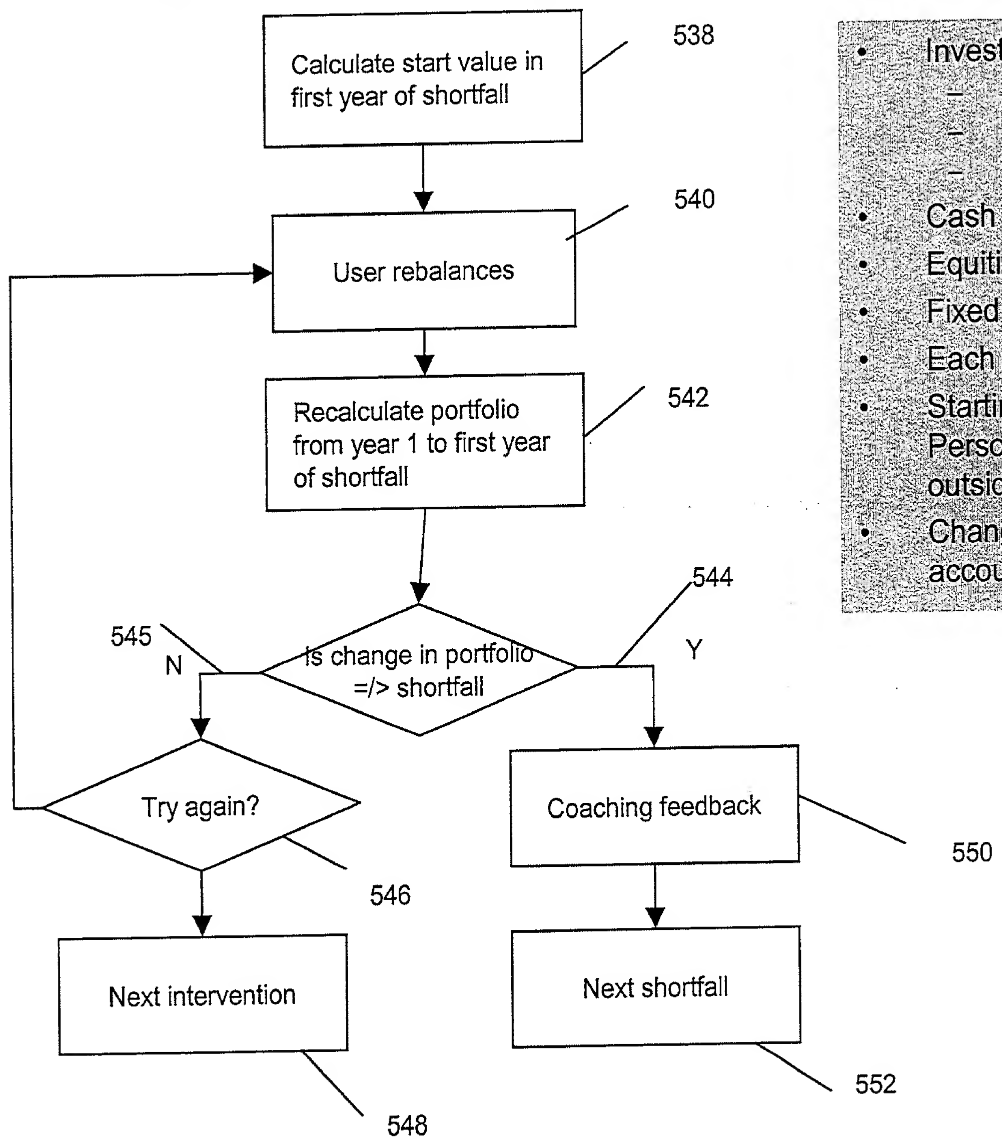

INTERVENTION: REDUCE LUXURY SPENDING
522
524
Year one
First year of shortfall
(End date= first year of shortfall)
528
530
Cumulative Savings
532
Target = Shortfall
(Bar chart shows progress against goal)
534
536
(Clickable list of recurrent expenses)

FIGURE 16

Replacement Sheet
App. No. 09/929,610

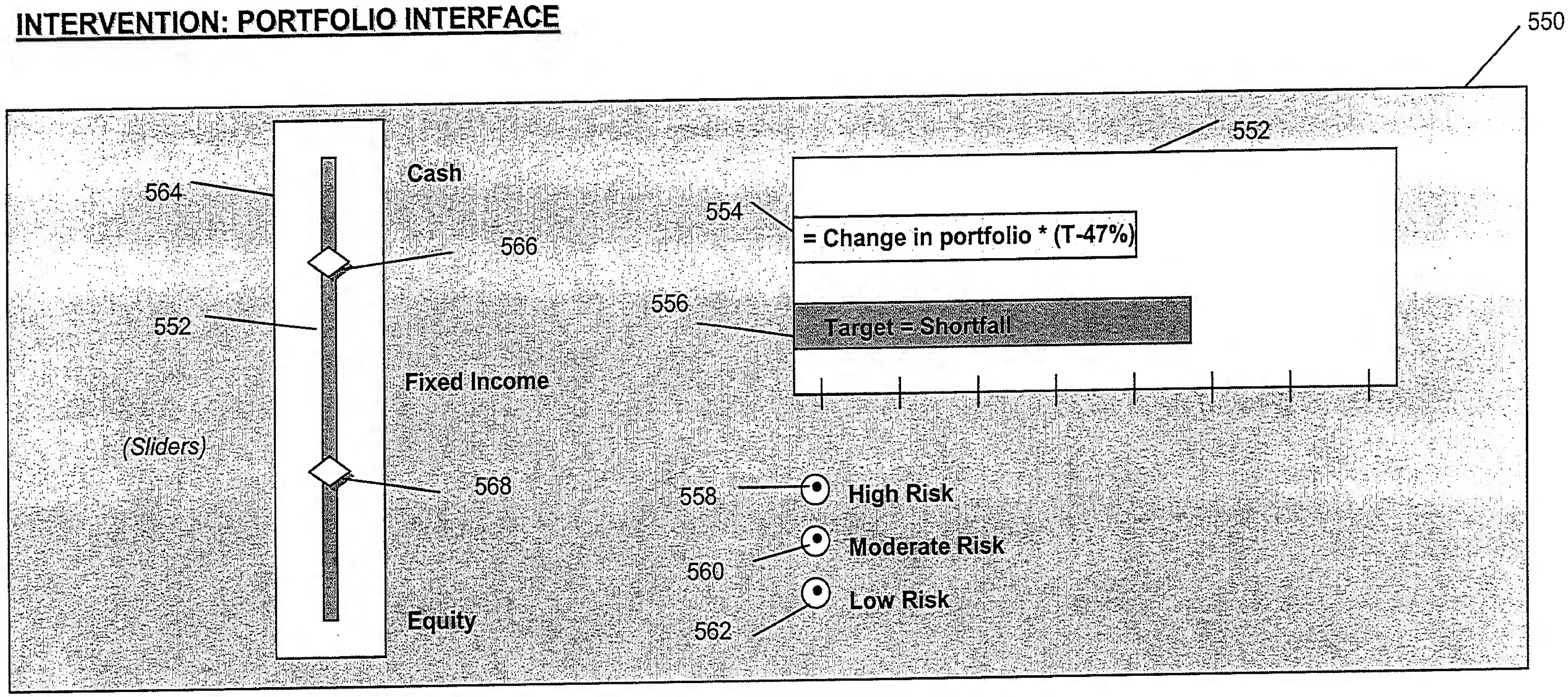
INTERVENTION: REBALANCE PORTFOLIO



- Investment portfolio has 3 components:
  - 1. Cash equivalents
  - 2. Equities
  - 3. Fixed income (bonds, etc.)
- Cash will be assumed to grow at 3%
- Equities will grow at 10%
- Fixed income will grow at 6%
- Each rate must be discounted by inflation= 2%
- Starting values in each asset class derived from Personal Net Worth data. (These assets must be outside IRA or 401K)
- Change of portfolio must be reduced by 10% to account for tax

FIGURE 17

INTERVENTION: PORTFOLIO INTERFACE



High risk "Light" flashes when equities > 35% of portfolio.
Moderate risk = 25%
Low risk = 15%

FIGURE 18

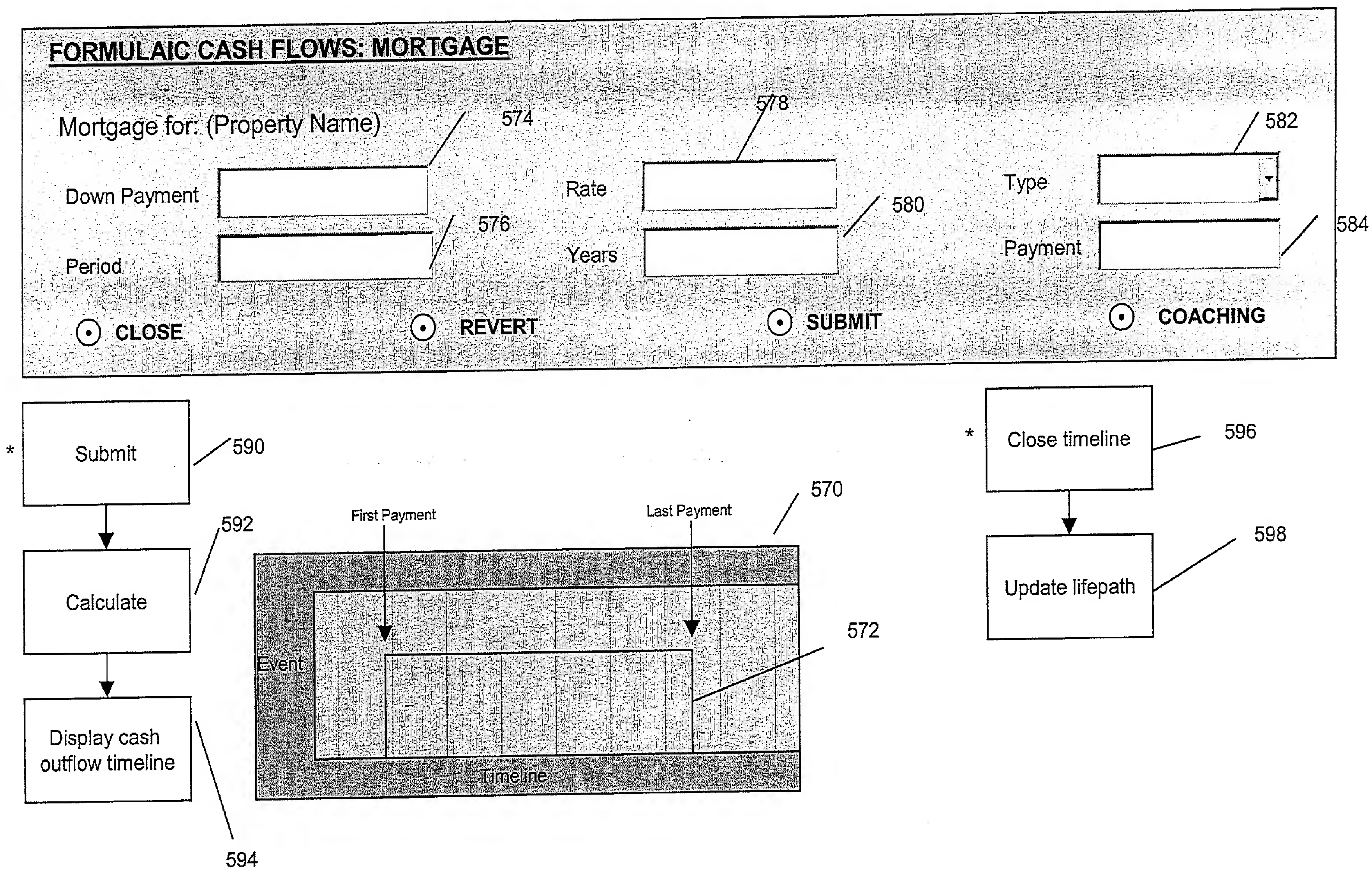

FORMULAIC CASH FLOWS: MORTGAGE
Mortgage for: (Property Name)
Down Payment
Period
Rate
Years
Type
Payment
CLOSE
REVERT
SUBMIT
COACHING
574
576
578
580
582
584
*
Submit
590
Calculate
592
Display cash outflow timeline
594
First Payment
Last Payment
Event
Timeline
570
572
*
Close timeline
596
Update lifepath
598

FIGURE 19

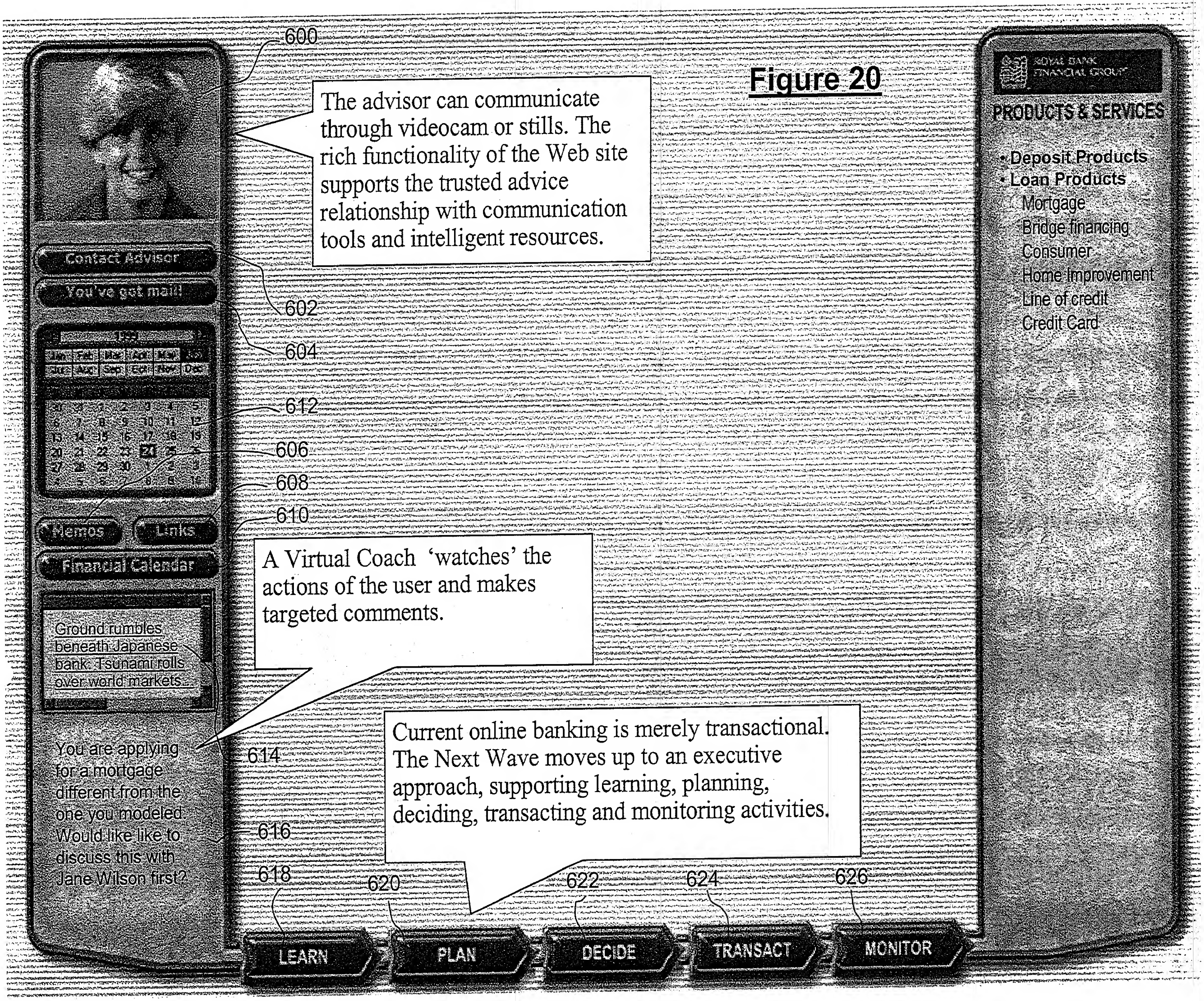

600
The advisor can communicate through videocam or stills. The rich functionality of the Web site supports the trusted advice relationship with communication tools and intelligent resources.
Contact Advisor
You've got mail!
602
604
612
606
608
610
Memos
Links
Financial Calendar
A Virtual Coach 'watches' the actions of the user and makes targeted comments.
Ground rumbles beneath Japanese bank. Tsunami rolls over world markets.
You are applying for a mortgage different from the one you modeled. Would like like to discuss this with Jane Wilson first?
614
616
618
620
622
624
626
Current online banking is merely transactional. The Next Wave moves up to an executive approach, supporting learning, planning, deciding, transacting and monitoring activities.
LEARN
PLAN
DECIDE
TRANSACT
MONITOR
ROYAL BANK FINANCIAL GROUP
PRODUCTS & SERVICES
• Deposit Products
• Loan Products
Mortgage
Bridge financing
Consumer
Home Improvement
Line of credit
Credit Card

Figure 20

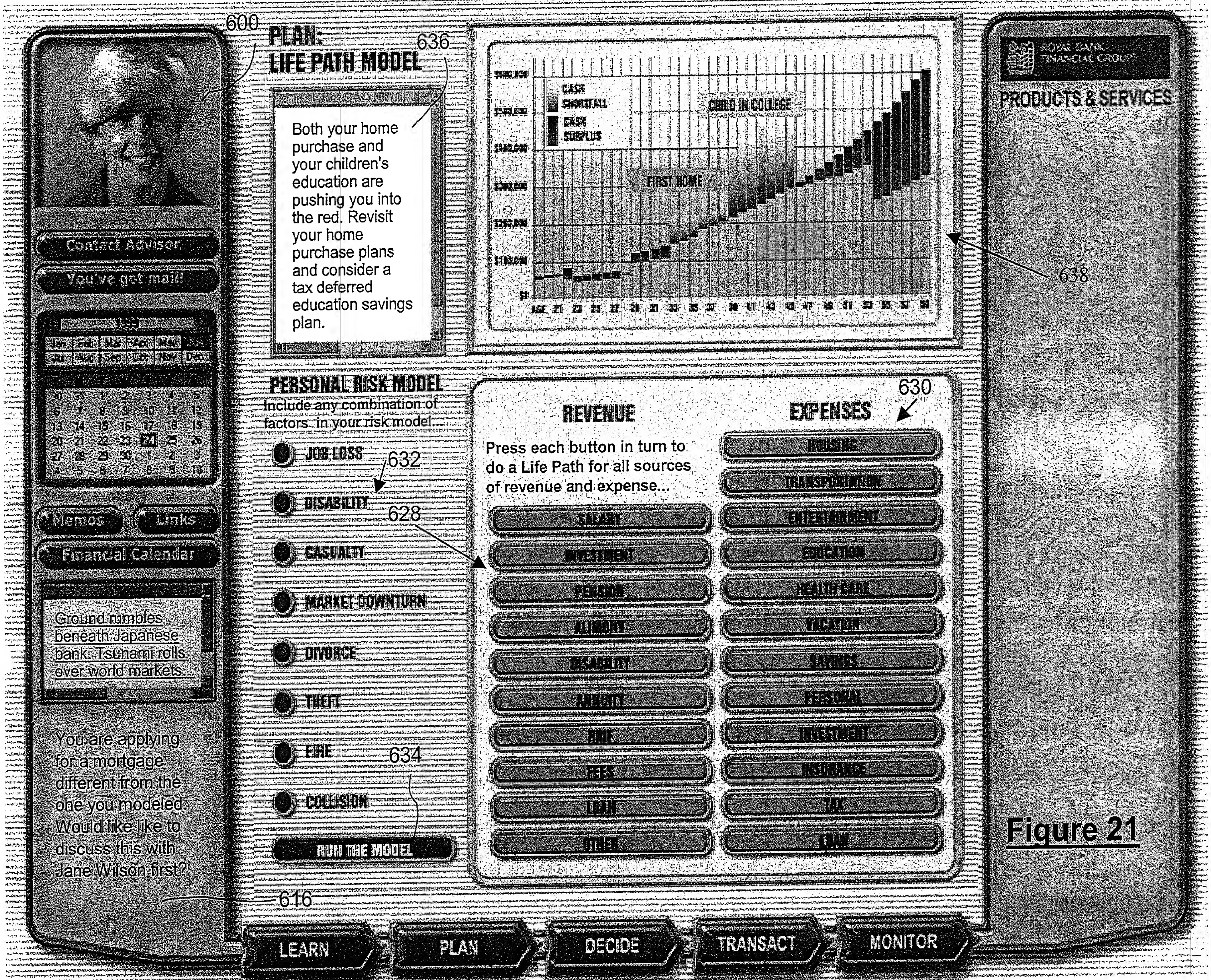

600
PLAN:
LIFE PATH MODEL
636
Both your home purchase and your children's education are pushing you into the red. Revisit your home purchase plans and consider a tax deferred education savings plan.
Contact Advisor
You've got mail!
Memos
Links
Financial Calendar
Ground rumbles beneath Japanese bank. Tsunami rolls over world markets...
You are applying for a mortgage different from the one you modeled Would like like to discuss this with Jane Wilson first?
616
CASH SHORTFALL
CASH SURPLUS
CHILD IN COLLEGE
FIRST HOME
638
ROYAL BANK FINANCIAL GROUP
PRODUCTS & SERVICES
PERSONAL RISK MODEL
Include any combination of factors in your risk model...
JOB LOSS
632
DISABILITY
628
CASUALTY
MARKET DOWNTURN
DIVORCE
THEFT
FIRE
634
COLLISION
RUN THE MODEL
630
REVENUE
EXPENSES
Press each button in turn to do a Life Path for all sources of revenue and expense...
SALARY
INVESTMENT
PENSION
ALIMONY
DISABILITY
ANNUITY
FEES
LOAN
OTHER
HOUSING
TRANSPORTATION
ENTERTAINMENT
EDUCATION
HEALTH CARE
VACATION
SAVINGS
PERSONAL
INVESTMENT
INSURANCE
TAX
LOAN
LEARN
PLAN
DECIDE
TRANSACT
MONITOR

Figure 21